

APPENDIX A-7

- A-7 17.20.924 Electric Transmission Lines, Economy Considerations
- A-7-A Renewable Portfolio Standards
- A-7-B Interconnect Queue

*Mountain States Transmission Intertie
MFSA Application*

APPENDIX A-7

ARM 17.20.924 Electric Transmission Lines, Economy Considerations

Paragraph	Subject Matter	Response
(1)	<i>For electric transmission lines where economy considerations are a basis of need, an application must contain the following, as relevant:</i>	
(1)(a)	<i>a system cost study for the 10 years following the date the proposed line is to be placed in service, showing system costs with and without the proposed line;</i>	NorthWestern Energy has not completed a system cost study because the purpose of MSTI is to reduce the congestion between Montana and Idaho. A system cost study is not applicable because there is no additional capacity available on the existing transmission lines from MT to ID. Additionally, this is not a traditional build-out of a transmission network. Rather, it is a facility intended to allow a new route for generation in MT and elsewhere to reach loads remote from the source. As such, the facilities economics must stand on its own and not be compared to NorthWestern Energy's or others existing transmission systems.
(1)(b)	<i>an analysis of markets and prices for surplus energy or of the need for the alternative sources of firm energy to be transmitted over the proposed line;</i>	The determination of the value of the facility will be made by customers willing to subscribe to the capacity. The markets for the firm power that will be generated in Montana and transmitted over MSTI are outside Montana. These markets could be anywhere in WECC. By having MSTI relieve the Montana to Idaho congestion and by having its southern terminal at Midpoint Idaho, Transmission Service Requests will have access to customers through a route that is currently inaccessible because

		<p>of the congestion. From Midpoint, there is opportunity to move power into Idaho, Utah, Nevada, Arizona, California and to the Northwest.</p> <p>With passage of the Renewable Portfolio Standards by many Western states, the development of renewable resources in Montana has a market opportunity that has never existed before. Attachment A-7 Attach A Renewable Portfolio Standards shows that eight of the western states have adopted some type of the Renewable Portfolio Standard requirement. NorthWestern Energy's generation interconnection queue has 2,134 MW of proposed renewable generation that is under study. See Attachment A-7 Attach B Interconnection Queue for a listing of the queue projects as of 6/14/2008. With MSTI, these potential renewable resources (and others not in the queue) have a much greater chance to be selected as one of the resources to meet the State's Renewable Portfolio Standard requirements.</p> <p>NorthWestern Energy has not completed an analysis of the expected market price that the renewable resource might receive.</p>
(1)(c)	an analysis of sources and prices for purchased energy to be received over the proposed line;	<p>The determination of the value of the facility will be made by customers willing to subscribe to the capacity.</p>
(1)(d)	an analysis of the demand for and price of wheeling services to be provided by the proposed line;	<p>The current demand for MSTI is 639 MW, which is supported by receipt of Transmission Service Requests through an open season solicitation (see response to K-8 (1)). It should be noted that NorthWestern Energy's original response from the open season solicitation was over 2000 MWs. The future demand for MSTI will be guided, for the most part, by customers outside Montana need for new generation and the ability of the Montana</p>

(1)(e)	<p data-bbox="365 1192 500 1690">other economic analysis relevant to demonstrating the need, economic feasibility or financial viability of the proposed lines;</p> <p data-bbox="267 233 329 1108">generation to be competitive with other sources that customers may have.</p> <p data-bbox="365 214 1019 1108">NorthWestern Energy's current generation interconnection queue (as posted on NorthWestern Energy's OASIS website, 6/14/2008) has over 3,400 MWs of proposed new generation that is under study (see A-7 Attach B Interconnection Queue). Since NorthWestern Energy's control area already has significantly more generation than load, each new MW that is built will cause a corresponding MW increase (ignoring losses) in NorthWestern Energy's export capability requirements. It is expected that some of this proposed new generation will obtain customers outside of Montana through a MSTI Transmission Service Request. NorthWestern Energy believes that focusing efforts on the development of the MSTI line has benefits for many parties including potential generation projects in Montana and load serving entities in Idaho, Utah, Colorado and other portions of the West. A concerted effort among these parties, the states and regulators could provide us with the first significant generation and transmission development in Montana since the 1980s and additional resources to meet growing loads within the western states.</p> <p data-bbox="1044 214 1284 1108">The primary purpose of MSTI is to reduce the congestion between Montana and Idaho thereby providing expanded access through Idaho to customer markets not available today because of congestion. Once relieved, customer market opportunities for new generation development in Montana are enhanced. Load growth inside Montana is not sufficient, about 25 MW per year, to sustain any meaningful generation development.</p> <p data-bbox="1304 233 1367 1108">However, load growth outside Montana provides a tremendous opportunity for generation development in Montana. Idaho</p>
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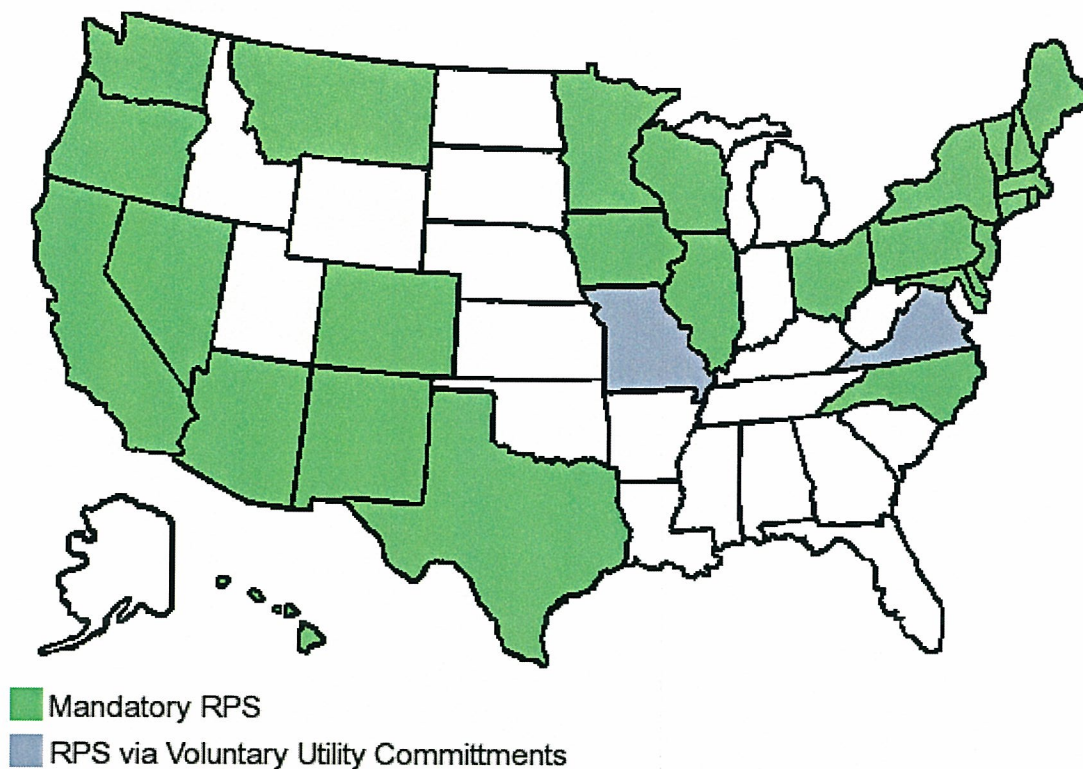
	<p>Power Company's peak load forecast in their 2008 Integrated Resource Plan Update is 1.8% per year (see Table 4, page 19, Attachment K-5 Attach K IPC draft2008IPRupdate).</p> <p>Beyond Idaho Power, 2008-2016 customers load growth forecast in the WECC region is 3,335 MW/Year (2%). However load growth varies by location: Canada 357 MW/Year (1.9%); Northwest 321 MW/Year (1.3%); Basin 315 MW/Year (2.4%); Rockies 331 MW/Year (2.4%); Desert SW 926 MW/Year (2.7%); No. CA 478 MW/Year (1.7%); and So CA/MX 608 MW/Year (1.7%). This information is taken from the 2007 WECC Power Supply Assessment, which provides a load forecast by sub-region. See Table 18, page 60, Attachment K-5 Attach L WECC PSA_Final_Report_09-17-07. The utilities that makeup each sub-region listed above can be found in Table 9, page 17.</p> <p>MSTI by itself (without other new regional transmission development) provides an expanded customer market opportunity that does not exist today because of Path 18 congestion. In addition to MSTI other Transmission Providers are proposing to develop new transmission to Mid Point Idaho. It is anticipated that Mid Point will become a transmission hub. When MSTI is coupled with these other proposed transmission developments, easier access to a larger market area will be achieved. See Attachment K-4 Attach K NTG 2007 Annual Planning Report 032608 for a description of these other proposed transmission developments. Even if all of these transmission proposals do not develop, opportunity for access to larger market areas is increased with each new transmission project.</p> <p>MSTI will also offer opportunity for arbitrage between the Northwest and loads south of Montana (i.e., Idaho, Utah, Nevada, etc.).</p>
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		<p>NorthWestern Energy is committed to facilitate a process by which proposed generation facilities in Montana could move generation capacity to market both inside and outside of Montana. The benefits to generators, customers and the state of Montana could be substantial. Of the significant amount of proposed generation capacity (i.e., 2 to 3 times Montana load) on the drawing board in Montana, very little will be able to come online without extensive transmission system infrastructure development because the existing system is congested and fully subscribed.</p>
(1)(f)	<p>a discussion of the relationship of the capacity of the proposed facility to the size of projected flows over the facility; and</p>	<p>Currently NorthWestern Energy has 639 MW of Transmission Service Requests remaining from NorthWestern Energy's open seasons solicitation. It is NorthWestern Energy's goal to obtain long-term commitments for a significant portion of MSTI's 1,500 MW transfer capability.</p> <p>NorthWestern Energy's generation interconnection queue has over 3,400 MW of new generation being proposed, of which 60% is renewable. While not all of these projects will probably be built, there continues to be strong interest for developing new generation, predominantly wind, in Montana. With all of these projects, construction of new transmission lines is critical for transporting power to loads within and outside of Montana and to alleviate congestion issues that are prevalent on existing lines. The Montana Legislature passed HB 3 in 2007, known as the "Clean and Green" energy bill, it provides tax incentives for future development and transmission of clean and renewable energy in Montana.</p>
(1)(g)	<p>if transmission capacity exists that could carry the desired energy or power flows without violating voltage drop, transfer</p>	<p>Sufficient transmission capacity does not exist on the existing transmission path between Montana and Idaho to move the current 639 MW of Transmission Service Requests.</p>

	capacity or other transmission planning criteria, a discussion of efforts by the applicant to reach an acceptable agreement with the owners of this transmission capacity to make it available to the applicant at reasonable cost and an explanation of why the proposed facility is preferable to use the existing facility.	
(2)	if the transmission grid is managed by a regional transmission organization (RTI) formed under FERC order 2000, the application must report:	Not Applicable.
(2)(a)	the extent of congestion and the costs of congestion throughout the year, with and without the proposed facility, for each affected flow path on the regional grid;	Not Applicable.
(2)(b)	a projection of the transmission rights that would be created by the proposed facility; and	Not Applicable.
(2)(c)	planning evaluations of the proposed facility written either by the RTO or another regional planning organization.	Not Applicable.

APPENDIX A-7-A

Renewable Portfolio Standards (RPS)¹



These states have set standards specifying that electric utilities generate a certain amount of electricity from renewable sources. Most of these requirements take the form of “renewable portfolio standards,” or RPS’s, which require a certain percentage of a utility’s power plant capacity or generation to come from renewable sources by a given date. The standards range from modest to ambitious, and definitions of renewable energy vary. Though climate change may not be the prime motivation behind some of these standards, the use of renewable energy does deliver significant GHG reductions. For instance, Texas is expected to avoid 3.3 million tons of CO₂ emissions annually with its RPS, which requires 2,000 megawatts of new renewable generation by 2009. Increasing a state’s use of renewable energy brings other benefits as well, including job creation, energy security, and cleaner air.

Some of these efforts have been particularly successful. For example, Connecticut increased its RPS in 2003, extending the standard to all utilities in the state. Iowa met its standard in 1999. Many states allow utilities to comply with the RPS through tradeable renewable energy credits. While the success of state efforts to increase renewable energy production will depend in part on federal policies such as

¹ From Pew Center on Global Climate Change at www.pewclimate.org

APPENDIX A-7-A

production tax credits, states have shown considerable efficacy in encouraging clean energy generation.

Updated: May 2nd, 2008

APPENDIX A-7-A

Montana

15% by 2015

On April 28, 2005, Governor Brian Schweitzer signed into law Senate Bill 415, The Montana Renewable Power Production and Rural Economic Development Act, which established a renewable energy portfolio standard for the state. SB 415 mandates that 15 percent of the state's energy come from renewable sources by 2015, and for each year thereafter. Sources of energy that count toward the standard include wind, solar, geothermal, existing hydroelectric projects, landfill or farm-based methane gas, wastewater-treatment gas, low-emission, nontoxic biomass, and fuel cells where hydrogen is produced with renewable fuels.

[Press Release](#)
[SB 415](#)

Washington [Mandatory RPS] -

15% by 2020

On November 7, 2006, Washington state voters approved ballot initiative 937, setting renewable energy standards for utility companies in the state. The measure requires all utilities serving 25,000 people or more to produce 15 percent of their energy using renewable sources by 2020. Such sources include wind, solar, and tidal power as well as landfill-methane capture. Sources of energy that count toward the standard include water, wind, solar, geothermal, landfill gas, wave, ocean, tidal power, gas from sewage treatment facilities, biodiesel fuel that is not derived from crops raised on land cleared from old growth or first-growth forests, and qualifying biomass resources.

[Initiative 937](#)

Oregon [Mandatory RPS] -

25% by 2025

On June 6, 2007, Governor Ted Kulongoski signed Senate Bill 838, adopting a renewable electricity portfolio standard for the state. SB 838 requires the state's largest utilities to meet 25 percent of their electric load with new renewable energy sources by 2025. Sources of energy that count toward the standard include wind, solar, wave, geothermal, biomass, new hydro or efficiency upgrades to existing hydro facilities.

[Press Release](#)
[SB 838](#)

California [Mandatory RPS] -

20% by 2010

On September 26, 2006 Governor Schwarzenegger signed Senate Bill 107, which requires California's three major utilities – Pacific Gas & Electric, Southern Edison, and San Diego Gas & Electric – to produce at least 20 percent of their electricity using renewable sources by 2010. Sources of energy that count toward the standard include biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, and tidal current.

[Press Release](#)
[SB 107](#)

APPENDIX A-7-A

Nevada [Mandatory RPS] -

20% by 2015 (at least 5% from solar)

On June 7, 2005 the Nevada Governor Kenny Guinn signed into law Assembly Bill 3, expanding Nevada's previous renewable portfolio standard. The updated standard requires that 20 percent of the state's electricity come from renewable energy sources by 2015, and for each year thereafter. Of the 20 percent, not less than 5 percent must be generated from solar renewable energy systems. Utilities can also earn credit for up to 25 percent of the standard through energy efficiency measures. Sources of energy that count toward the standard include biomass, fuel cells, geothermal, solar, waterpower, and wind.

[AB 3](#)

Arizona [Mandatory RPS] -

15% by 2025

On February 27, 2006, the Arizona Corporation Commission introduced new renewable energy standards requiring regulated electric utilities to generate 15 percent of their energy from renewable resources by 2025. Customers will face a slightly higher Environmental Portfolio Surcharge to offset the cost of compliance. If a utility does not meet the standard, the Commission may assess a penalty for non-compliance. The new rules also require a growing percentage of the total resource portfolio to come from distributed generation. Sources of energy that count toward the standard include electricity produced from qualifying biogas, hydropower, fuel cells that use only renewable fuels, geothermal, hybrid wind and solar, landfill gas, solar, and wind.

[Press Release](#)
[RPS](#)

Colorado [Mandatory RPS] -

20% by 2020 (at least 4% from solar)

On March 27, 2007, Governor Bill Ritter signed House Bill 1281, which increased Colorado's previous renewable portfolio standard. Under the new standard, large investor-owned utilities are required to produce 20 percent of their energy from renewable resources by 2020, 4 percent of which must come from solar-electric technologies. HB 1281 requires municipal utilities and rural electric providers to provide 10 percent of their electricity from renewable sources by 2020. Sources of energy that count toward the standard include solar, wind, geothermal, biomass, and small hydroelectric.

[Press Release](#)
[HB 1281](#)

New Mexico [Mandatory RPS] -

20% by 2020

On March 5, 2007, Governor Bill Richardson signed into law Senate Bill 418, which established a renewable portfolio for the state. SB 418 mandates that by 2020, 20 percent of an electric utility's power come from renewable sources. Sources of energy that count toward the standard include solar, wind, hydropower, geothermal, fuel cells that are not fossil fueled, and qualifying biomass resources.

[Press Release](#)
[SB 418](#)

APPENDIX A-7-A

Texas [Mandatory RPS] -

5,880 MW by 2015

On August 1, 2005, Governor Rick Perry signed a bill increasing the amount of renewable generation required in the state. The law requires that 5,880 megawatts of new renewable generation be built in the state by 2015, which will meet about 5 percent of the state's projected electricity demand. The legislation also sets a cumulative target of installing 10,000 megawatts of renewable generation capacity by 2025. In an effort to diversify the state's renewable generation portfolio, the measure also includes a requirement that the state must meet 500 megawatts of the 2025 target with non-wind renewable generation.

[Press Release](#)

[RPS](#)

APPENDIX-7-B

UPDATED: 5/26/2008

INTERCONNECTION QUEUE

62%															
Project Number	Queue Position	Date Interconnection Request Received	Location	Interconnect Point	Type of Interconnection Service Requested	NorthWestern Energy Affiliate	In-Service Date	Generating Facility Type	Summer Output (MW)	Winter Output (MW)	Active Requests344 6.1MW	Active Rwnable 2134.1MW	Status	Studies Available	Comments
4		April 9, 2001	Wheatland County, Montana	Broadview - Judith Gap 230 kV Line	Network Resource		February 15, 2006	Wind	188	188			In-Service	System Impact Study Facilities Study	
5		April 19, 2001	Big Horn County, Montana	Hardin Auto Substation	Network Resource		April 14, 2006	Base Load - Coal Fired	109	109			In-Service	System Impact Study Facilities Study	
6		May 14, 2001	Sanders County, Montana	Thompson Falls - Kerr 115 kV "B" Line	Network Resource			Base Load - Bio Mass & Coal Fired	12	12			In-Service	System Impact Study Facilities Study	
7		May 25, 2001	Cascade County, Montana	Great Falls 230 kV Switchyard	Network Resource	X		Gas Fired	280	280			Withdrawn	Feasibility Study System Impact Study Facilities Study	Large Generator Interconnecton Agreement was cancelled at customer's request.
11		August 10, 2001	Wheatland County, Montana	Two Dot Substation Distribution	Energy Resource		March 8, 2004	Wind	0.455	0.455			In-Service		
14	1	August 28, 2001	Yellowstone County, Montana	Broadview Substation	Energy Resource		May 31, 2009	Base Load - Coal Fired	700	700	700		Active	Feasibility Study System Impact Study Facilities Study	Certain studies in the interconnection process for this project have been delayed due to customer requests or at NorthWestern's request, in accordance with the LGIP/OATT, but the project's queue position is still active and appropriate. These studies are
17		January 7, 2002	Glacier County, Montana	Conrad Auto - Cut Bank 115 kV Line	Network Resource			Wind	75	75			Withdrawn	System Impact Study Facilities Study	Large Generator Interconnection Agreement was not Returned
20		March 15, 2002	Rosebud County, Montana	Costrip Switchyard	Energy Resource		April 1, 2013	Base Load - Coal Fired	500	500			Withdrawn	Feasibility Study System Impact Study	Revised In-Service Date at Interconnection Customer's request. Certain studies in the interconnection process for this project have been delayed due to customer requests or at NorthWestern's request, in accordance with the LGIP/OATT, but the project's qu
21		July 2, 2002	Jefferson County, Montana	Golden Sunlight Substation	Network Resource			Wind	75	75			Withdrawn	Feasibility Study System Impact Study Facilities Study	Large Generator Interconnection Agreement was not Returned
23		August 15, 2002	Cascade County, Montana	Great Falls NW - Holter 100 kV Line	Energy Resource		February 27, 2006	Wind	9	9			In-Service	Feasibility Study System Impact Study Facilities Study	
24		February 4, 2003	Carbon County, Montana	Bridger Auto Substation	Network Resource			Wind	100	100			Withdrawn	Feasibility Study	Interconnection Request Withdrawn
25		February 14, 2003	Meagher County, Montana	Martinsdale Substation Distribution	Energy Resource		November 1, 2004	Wind	0.715	0.715			In-Service		
27		February 25, 2003	Silver Bow County, Montana	MHD Substation	Network Resource		May 23, 2006	Peaking - Gas Fired	53	53			In-Service	Feasibility Study System Impact Study Facilities Study	In-Service Date Revised
28		April 4, 2003	Gallatin County, Montana	Jack Rabbit Substation Distribution	Energy Resource			Fuel Cell	0.5	0.5			Withdrawn		
29		September 15, 2003	Missoula County, Montana	Reserve St. Substation Distribution	Energy Resource			Methane Gas	0.99	0.99			Withdrawn		System Impact Study Agreement not returned.
30		January 26, 2004	Stillwater County, Montana	Columbus Rapelje - Big timber 161 kV Line	Energy Resource			Wind	50.4	50.4			Withdrawn	Feasibility Study	Interconnection Request Withdrawn
31	2	May 11, 2004	Stillwater County, Montana	Wilsall - Shorey Road 230 kV Line	Network Resource		December 31, 2011	Wind	396	396	396	396	Active	Feasibility Study System Impact Study	Revised In-Service Date at Interconnection Customer's request. Certain studies in the interconnection process for this project have been delayed due to customer requests or at NorthWestern's request, in accordance with the LGIP/OATT, but the project's q
32		July 1, 2004	Cascade County, Montana	Great Falls 230 kV Switchyard	Network Resource		March 31, 2009	Base Load- Coal Fired	268	268			Signed LGIA	Feasibility Study System Impact Study	Large Generator Interconnecton Agreement executed.
33	3	November 3, 2004	Wheatland County, Montana	Martinsdale Substation	Network Resource		June 30, 2009	Wind	52.5	52.5	52.5	52.5	Active	Feasibility Study System Impact Study	Output size reduced from 75 MW to 52.5 MW. In-Service Date Revised. Certain studies in the interconnection process for this project have been delayed due to customer requests or at NorthWestern's request, in accordance with the LGIP/OATT, but the proje
34		January 26, 2005	Wheatland County, Montana	Two Dot Substation Distribution	Energy Resource		August 16, 2006	Wind	0.39	0.39			In-Service	Feasibility Study	Output size reduced from 3 MW to 0.5 MW
35		February 3, 2005	Wheatland County, Montana	Martinsdale Substation Distribution	Energy Resource		September 13, 2006	Wind	2	2			In-Service	Feasibility Study	Output size reduced from 5 MW to 2 MW
36		July 15, 2005	Rosebud County, Montana	Colstrip 500 kV Switchyard	Network Resource		June 1, 2006	Base Load - Coal Fired	56	56			Withdrawn	Feasibility Study System Impact Study	
37		July 15, 2005	Rosebud County, Montana	Colstrip 230 kV Switchyard	Network Resource		October 1, 2006	Base Load - Coal Fired	32	32			Withdrawn	Feasibility System Impact Study	
38	4	August 1, 2005	Wheatland County, Montana	Martinsdale Substation	Energy Resource		June 30, 2009	Wind	81.9	81.9	81.9	81.9	Active	Feasibility Study	Output reduced from 82.5 MW to 81.9 MW with approved wind turbine change. In-Service Date Revised. Certain studies in the interconnection process for this project have been delayed due to customer requests or at NorthWestern's request, in accordance wi
39	5	August 12, 2005	Yellowstone County, Montana	Billings Steam Plant Switchyard	Network Resource		Upon completion of interconnection process.	Base Load - Coal Fired	22	22	22		Active	Feasibility Study System Impact Study	Certain studies in the interconnection process for this project have been delayed due to customer requests or at NorthWestern's request, in accordance with the LGIP/OATT, but the project's queue position is still active and appropriate. These studies are
40	6	August 29, 2005	Hand County, South Dakota	St. Lawrence - Highmore 69 kV Line	Network Resource		Requested revised date	Wind	50	50	50	50	Active	System Impact Study	Certain studies in the interconnection process for this project have been delayed due to customer requests or at NorthWestern's request, in accordance with the LGIP/OATT, but the project's queue position is still active and appropriate. These studies are
41		November 1, 2005	Jefferson County, Montana	Golden Sunlight Substation	Network Resource			Wind	100	100			Withdrawn	Feasibility Study	
42		February 1, 2006	Meagher County, Montana	Distribution feeder to Martinsdale Substation	Network Resource			Wind	7.5	7.5			Withdrawn		
43		March 13, 2006	Lake County, Montana	Kerr Switchyard	Network Resource		Upon completion of interconnection process.	Hydro	14 MW	14 MW			Withdrawn	Feasibility System Impact Study	Interconnection Request withdrawn.

INTERCONNECTION QUEUE

62%																
Project Number	Queue Position	Date Interconnection Request Received	Location	Interconnect Point	Type of Interconnection Service Requested	NorthWestern Energy Affiliate	In-Service Date	Generating Facility Type	Summer Output (MW)	Winter Output (MW)	Active Requests344 6.1MW	Active Rewnabla 2134.1MW	Status	Studies Available	Comments	
44	7	April 10, 2006	Pondera County, Montana	South Cut Bank to Conrad Auto 115 kV	Network Resource		October 15, 2008	Wind	104 MW	104 MW			Active	Feasibility System Impact Studu	Certain studies in the interconnection process for this project have been delayed due to customer requests or at NorthWestern's request, in accordance with the LGIP/OATT, but the project's queue position is still active and appropriate. These studies are	
45		May 5, 2006	Jefferson County, Montana	Golden Sunlight Substation Distribution	Network Resource Energy Resource			Wind	60 MW	60 MW			Withdrawn	Feasibility System Impact Study		
46	8	June 5, 2006	Meagher County, Montana	100 kV line between Loweth and Two Dot at Groveland.	Network Resource		September 1, 2007	Wind	10 MW	10 MW	10		Active	Feasibility Study System Impact Study	Certain studies in the interconnection process for this project have been delayed due to customer requests or at NorthWestern's request, in accordance with the LGIP/OATT, but the project's queue position is still active and appropriate. These studies are	
47	9	June 8, 2006	Liberty County, Montana	69 kV line at Chester	Network Resource		December 31, 2009	Wind	20 MW	20 MW	20	20	Active	Feasibility System Impact Study	Output size increased to 20 MW from 19.5 MW. Certain studies in the interconnection process for this project have been delayed due to customer requests or at NorthWestern's request, in accordance with the LGIP/OATT, but the project's queue position is st	
48		June 12, 2006	Teton County, Montana	Choteau 69 kV Substation				Wind	18.9 MW	18.9 MW			Withdrawn	Feasibility	System Impact Study Agreement not returned.	
49	10	June 16, 2006	Cascade County, Montana	Rainbow Switchyard	Network Resource		December 31, 2011	Hydro	23 MW	23 MW	23		Active	Feasibility System Impact Study	Certain studies in the interconnection process for this project have been delayed due to customer requests or at NorthWestern's request, in accordance with the LGIP/OATT, but the project's queue position is still active and appropriate. These studies are	
50		June 29, 2006	Teton County, Montana	Dutton 69 kV Substation	Network Resource		December 1, 2010	Wind	18.9 MW	18.9 MW			Withdrawn	Feasibility System Impact Study	Facility Study Agreement not returned. Interconnection Request withdrawn.	
51	11	August 21, 2006	Teton County, Montana	Fairfield Substation	Network Resource		December 31, 2009	Hydro	15 MW	15 MW	15	15	Active		Customer granted extension to provide site control.	
52		September 18, 2006	Sweet Grass, Montana	161 kV line between Big Timber and Clyde Park Substations	Energy Resource			Wind	80 MW	80 MW			Withdrawn	Feasibility		
53	12	December 6, 2006	Cascade County, Montana	Great Falls 230 kV Switchyard	Energy Resource		September 1, 2009	Gas Fired	277 MW	277 MW	277		Active	Feasibility System Impact Study	Reduced MW to 277 MW from 290 MW at Customer's Request. Certain studies in the interconnection process for this project have been delayed due to customer requests or at NorthWestern's request, in accordance with the LGIP/OATT, but the project's queue po	
54	13	February 23, 2007	Sweet Grass and Stillwater County, Montana	230 kV line from Wilsall to Shorey Road	Energy Resource Network Resource		December 31, 2008	Wind	100 MW	100 MW	100	100	Active		Certain studies in the interconnection process for this project have been delayed due to customer requests or at NorthWestern's request, in accordance with the LGIP/OATT, but the project's queue position is still active and appropriate. These studies are	
55		March 5, 2007	Pondera County, Montana	Conrad 230 kV Substation	Energy Resource Network Resource			Wind	250 MW	250 MW			Withdrawn			
56		March 5, 2007	Glacier County, Montana	Cut Bank 115 kV Substation	Network Resource		October 1, 2008	Wind	110 MW	110 MW			Withdrawn	Feasibility	Interconnection Request withdrawn.	
57	14	March 8, 2007	Madison County, Montana	Bradley Creek Substation	Network Resource Energy Resource		December 31, 2008	Wind	85 MW	85 MW	85	85	Active	Feasibility System Impact Study	Output reduced from 149 MW to 85 MW per Section 4.4.1 of the LGIP. Certain studies in the interconnection process for this project have been delayed due to customer requests or at NorthWestern's request, in accordance with the LGIP/OATT, but the project	
58	15	March 9, 2007	Madison County, Montana	100 kV line approximately 2.2 miles north of Bradley Creek Substation.	Network Resource		September 30, 2008	Wind	10 MW	10 MW	10	10	Active	Feasibility System Impact Study		
59		April 17, 2007	Need more information	Need more information	Network Resource		October 1, 2007	Hydro	2.2 MW	2.2 MW			Withdrawn		Requested information not returned by due date.	
60	16	April 27, 2007	Madison County, Montana	100 kV line approximately 1.5 miles north of Bradley Creek Substation.	Network Resource		December 31, 2008	Wind	20 MW	20 MW	20	20	Active	Feasibility System Impact Study		
61	17	May 24, 2007	Granite County, Montana	25 kV line between Phillipsburg and Anaconda,	Network Resource		October 1, 2007	Hydro	2.0 MW	2.0 MW	2	2	Active	System Impact Study		
62	18	May 25, 2007	Teton County, Montana	69 kV line between Fairfield and Bole	Network Resource		June 1, 2009	Hydro	11.5 MW	11.5 MW	11.5	11.5	Active		Certain studies in the interconnection process for this project have been delayed due to customer requests or at NorthWestern's request, in accordance with the LGIP/OATT, but the project's queue position is still active and appropriate. These studies are	
63	19	June 11, 2007	Rosebud County, Montana	69 kV line near Sumatra Substation	Network Resource		December 31, 2008	Wind	5 MW	5 MW	5	5	Active	Feasibility		
65	20	June 11, 2007	Rosebud County, Montana	69 kV line near Sumatra Substation	Network Resource		December 31, 2008	Wind	5 MW	5 MW	5	5	Active	Feasibility		
66	21	June 11, 2007	Rosebud County, Montana	69 kV line near Sumatra Substation	Network Resource		December 31, 2008	Wind	5 MW	5 MW	5	5	Active	Feasibility		
67	22	June 11, 2007	Rosebud County, Montana	69 kV line near Sumatra Substation	Network Resource		December 31, 2008	Wind	5 MW	5 MW	5	5	Active	Feasibility		
68	23	June 11, 2007	Rosebud County, Montana	69 kV line near Sumatra Substation	Network Resource		December 31, 2008	Wind	5 MW	5 MW	5	5	Active	Feasibility		
69	24	June 11, 2007	Rosebud County, Montana	69 kV line near Sumatra Substation	Network Resource		December 31, 2008	Wind	5 MW	5 MW	5	5	Active	Feasibility		
70	25	June 11, 2007	Rosebud County, Montana	69 kV line near Sumatra Substation	Network Resource		December 31, 2008	Wind	5 MW	5 MW	5	5	Active	Feasibility		
71	26	June 11, 2007	Rosebud County, Montana	69 kV line near Sumatra Substation	Network Resource		December 31, 2008	Wind	5 MW	5 MW	5	5	Active	Feasibility		
72	27	June 11, 2007	Rosebud County, Montana	69 kV line near Sumatra Substation	Network Resource		December 31, 2008	Wind	5 MW	5 MW	5	5	Active	Feasibility		
73	28	July 13, 2007	Glacier County, Montana	Cut Bank 115 kV Substation between Cut Bank & Shelby	Network Resource		November 30, 2008	Wind	100 MW	100 MW	100	100	Active	Feasibility System Impact Study	Certain studies in the interconnection process for this project have been delayed due to customer requests or at NorthWestern's request, in accordance with the LGIP/OATT, but the project's queue position is still active and appropriate. These studies are	
74	29	September 11, 2007	Silver Bow County, Montana	ASMI 161 kV Substation	Network Resource		July 1, 2010	Gas Fired	280 MW	280 MW	280		Active	Feasibility	Project clarified project output was 280 MW not 250 MW per scoping meeting. Output reduced from 280 MW to 230 MW per Section 4.4.1 of the LGIP.	
75	30	September 17, 2007	Madison County, Montana	161 kV line approx 5 miles north of the Bradley Creek Substation	Network Resource Energy Resource		December 31, 2008	Wind	75.6 MW	75.6 MW	75.6	75.6	Active	Feasibility		

INTERCONNECTION QUEUE

62%													Status	Studies Available	Comments	
Project Number	Queue Position	Date Interconnection Request Received	Location	Interconnect Point	Type of Interconnection Service Requested	NorthWestern Energy Affiliate	In-Service Date	Generating Facility Type	Summer Output (MW)	Winter Output (MW)	Active Requests3446.1MW	Active Rewnable2134.1MW				
76	31	September 17, 2007	Madison County, Montana	100 kV line approx 5 miles north of the Bradley Creek Substation	Network Resource Energy Resource		December 31, 2008	Wind	75.6 MW	75.6 MW	75.6	75.6	Active	Feasibility		
77	32	December 6, 2007	Deer Lodge County, Montana	Millcreek Substation 230kV Switchyard	Network Resource Energy Resource	Yes	December 24, 2010	Gas Fired	213 MW	213 MW			Active	Feasibility	Project clarified project output was 213 MW not 203 MW per scoping meeting.	
78	33	December 11, 2007	Glacier County, Montana	115kV between Cut Bank & Conrad	Energy Resource		November 30, 2008	Wind	100 MW	100 MW	100	100	Active	System Impact Study		
79	34	January 17, 2008	Sweet Grass and Stillwater County, Montana	230kV Bus at Broadview 500kV:230kV Station	Network Resources		December 31, 2013	Wind	200 MW	200 MW	200	200	Active		Project clarified Point of Interconnection was the 230kV Bus at Broadview 500kV:230kV station not 230kV line from Wilsall to Shorey Road per scoping meeting.	
80	35	February 28, 2008	Sweet Grass County	North River Road	Network Resource Energy Resource		September 18, 2009	Wind	80 MW	80 MW	80	80	Active			
81	36	March 11, 2008	Cascade County, Montana	Near Rainbow Switchyard	Network Resource Energy Resource		May, 2011	Hydro	12 MW	12 MW	12	12	Active			
82	37	March 11, 2008	Cascade County, Montana	Near Rainbow Switchyard	Network Resource Energy Resource		February, 2010	Hydro	Effeciency Improvement	Effeciency Improvement		0	Active			
83	38	March 11, 2008	Cascade County, Montana	Near Rainbow Switchyard	Network Resource Energy Resource		2018	Hydro	52 MW	52 MW	52	52	Active			
84	39	March 17, 2008	Choteau County, Montana	69kV between Big Sandy & Loma Substation	Network Resource		June 30, 2009	Wind	20 MW	20 MW	20	20	Active			
85	40	March 17, 2008	Wheatland County, Montana	Near Shawmut	Network Resource		May 1, 2011	Wind	10 MW	10 MW	10	10	Active		In-Service Date clarified at the Scoping Meeting.	
86	41	April 14, 2008	Glacier County, Montana	Near Glacier	Network Resource		December 31, 2008	Wind	10 MW	10 MW	10	10	Active			
87	42	April 18, 2008	Glacier County, Montana	Cut Bank 115 kV Substation between Cut Bank & Shelby	Energy Resource		November 30, 2008	Wind	100 MW	100 MW	100	100	Active			
88	43	April 22, 2008	Park County, Montana	Near Livingston City Substation	Network Resource		December 31, 2009	Wind	20 MW	20 MW	20	20	Active			
89	44	April 24, 2008	Meagher County, Montana	100 kV line between Loweth and Two Dot at Groveland.	Network Resource		July 31, 2009	Wind	20 MW	20 MW	20	20	Active			
90	45	May 5, 2008	Golden Valley County, Montana	Harlowton to Broadview 115kV Line	Network Resource		December 31, 2011	Wind	80 MW	80 MW	80	80	Active			
91	46	May 5, 2008	Golden Valley County, Montana	Harlowton to Broadview 230kV Line	Network Resource		December 31, 2013	Wind	280 MW	280 MW	280	280	Active			
92	47	May 21, 2008	Cascade County, Montana	South of Manchester, Montana	Network Resource		Upon completion of interconnection process.	Wind	10 MW	10 MW	10	10	Active			

